

IMAGE Newsletter

TEMPUS Study Results: Is Timing Everything?

Insulin sensitivity is an important determinant of diabetes risk and overall health. Multiple studies have shown that estrogen-based hormone therapy reduces incidence of diabetes in postmenopausal women. Our own prior studies suggested that this may be due to a beneficial effect of estrogens on insulin sensitivity. However, estrogens may not be beneficial to all postmenopausal women. We recently conducted a study to test whether the timing of starting estrogen relative to how long a woman has been postmenopausal determines whether estrogen has beneficial effects on insulin sensitivity.

The TEMPUS (Timing of Estrogen after Menopause) study recruited women who had never used estrogen therapy and were either within 6 years of menopause (early postmenopausal) or more than 10 years past menopause (late postmenopausal). All of the women enrolled in the study were healthy not obesity, and not diabetic. Compared to early postmenopausal women, late postmenopausal women had less muscle mass but did not have more fat mass or worse insulin sensitivity. Women were studied on two separate occasions following one week of treatment with either estrogen (transdermal estradiol) or placebo (no estradiol). The results showed that estrogen improved insulin sensitivity in the early postmenopausal group but decreased insulin sensitivity in the late postmenopausal group. These findings support the concept that starting estrogen treatment early in menopause may be important for certain health benefits. Moreover, it is possible that starting estrogen years after going through menopause is harmful. Muscle and fat tissue collected during these studies are currently being analyzed to delve deeper into the reason why estrogen improved insulin sensitivity early but worsened it later in menopause. These types of studies are designed to help us understand how estrogen actions changes over time after menopause. It is our hope that such insights will eventually lead to improvements in women's health. We extend our deepest gratitude to all of the wonderful volunteers who made these studies possible. (Principal Investigator Rachael E. Van Pelt, PhD, COMIRB #11-0788)

NEW STAFF ANNOUNCEMENT

Andrew Overstreet

Andrew received his BS in Sport & Exercise Science from the University of Northern Colorado in 2014, and also received his MS in Sport & Exercise Science with an emphasis in Exercise Physiology from UNC in 2016. He is currently certified through the American College of Sports Medicine and the National Strength & Conditioning Association. Before joining the IMAGE group, Andrew had internships in Strength & Conditioning and cancer rehab and worked as a personal trainer. He currently works with the PACE and WATCH studies.



NEW STAFF ANNOUNCEMENT

Blythe Dollar

Blythe has a BS in Psychology from Colorado State University and earned a Master of Public Health with a focus on Community and Behavioral Health from the Colorado School of Public Health. She is currently working with Dr. Rebecca Boxer on a study that looks to increase activity in patients with heart failure. When she is not at work you can find her teaching and practicing yoga, doing handstands, watching live music, hanging with her dog and traveling with her husband!

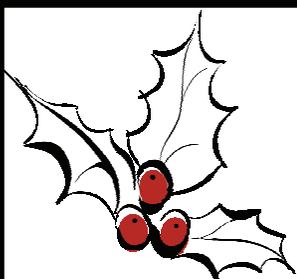


IMAGE HOLIDAY PARTY

Monday, December 12, 2016

3:30-6:00 PM

Keep an eye out for the invitations.

The Holiday party is at the same location as last year's party (Krugman Hall, Rm 2100, in RC2). Reserve the Date !!!

Directions and parking details can be found at

www.medschool.ucdenver.edu/image



Does the image group have a study for you?

Exercise for Healthy Aging (EHA) The goal of this study is to determine whether a high versus a moderate intensity of cardiovascular and strength training has a greater improvement on health and quality of life. We are looking for men between the ages of 50-70, who are not currently exercising, to workout in our supervised gym 3x/week for 6 months. **Participants receive:** A heart stress test to make sure exercise is safe for you, two body composition scans, free supervised exercise sessions, and compensation for your time. It is a great way to fulfill your exercise goals, build muscle mass, and have fun! Contact Kristine Erlandson M.D. at: 303-724-4941 or Kristine.erlandson@ucdenver.edu for more information. (COMIRB14-2207)

SITA Study: Are you between the ages of 22 and 70 years old with type 2 diabetes who takes metformin only for your diabetes, you may qualify for this study. This research study will evaluate the effects of two FDA-approved diabetes medications on cardiovascular function during exercise. Qualified participants will receive study medication, as well as free lab screenings, physical exams and exercise testing. Financial compensation is provided. If interested, email Deirdre.rafferty@ucdenver.edu or call Deirdre 720-848-6688 (PI: Regensteiner, COMIRB# 13-2015)

CardioVOLT The purpose of this study is to investigate how the loss of testosterone affects the health of the heart and arteries in men. We are looking for men 18-40 years or 50-70 years old, in general good health. No history of cancer, diabetes or heart disease. Volunteers should not be currently taking testosterone replacement therapy or exercising vigorously more than 2 days per week. To learn more, please call Sue at 303 724-2253 or email cardiovolt.study@ucdenver.edu (PI Kerrie Moreau COMIRB # 15-1162)

The **PCM study** is testing the accuracy of a new instrument that measures the amount of calories burned, based on heat production by the body. We are seeking men & women between the ages of 18-99 years old, who are healthy, do not smoke, are able to exercise, and do not have an allergy to nickel. Females cannot be currently or recently pregnant or lactating. The study involves two parts: Day 1-2: reside on the CTRC in our metabolic room for ~48hrs and Day 3-10: 8 days in normal living conditions wearing activity monitors). To learn more, please contact Tracy @ tracy.swibas@ucdenver.edu or call (720) 848-6418. (PI: Melanson, COMIRB# 13-2944)

The purpose of the **MYTH** study is to learn more about where the fat cells in your body come from. We are enrolling men and women who are 21-40 or 55-100 years old with a BMI of 22-35 kg/m². Volunteers should be healthy, weight stable, non-active or moderately active, and not taking any

hormonal therapy (e.g., testosterone, estrogen replacement, or hormonal contraceptives). If you meet these qualifications and are willing to undergo a fat biopsy, please contact Kathleen at 303-724-7472 or Kathleen.Gavin@ucdenver.edu. (COMIRB#: 15-1779)

The **BMT/CML** study is looking for people who have either had an allogeneic hematopoietic stem cell transplant (at least 6 months ago) **OR** have chronic phase chronic myeloid leukemia to participate in a research study to understand if some fat cells may come from cells in the bone marrow. If you meet one of the two qualifications above, are between the ages of 18 and 75 and think you may be interested in participating, please contact Kathleen at 303-724-7472 or Kathleen.Gavin@ucdenver.edu. (COMIRB#: 13-0026)

The **FAME study** is examining how the loss of estrogen changes metabolism and risk of disease in women. Eligible participants are healthy women between the ages of 40 and 60 years who have regular menstrual cycles and are not currently using hormonal contraceptives. Monetary compensation will be provided for your time (up to \$900). To learn more, please call 720-848-6399 or email: FAMEstudy@ucdenver.edu. (COMIRB# 12-1157)

PACE Sr: We are seeking physically active women and men for a research study. The purpose of the research we are conducting is to determine how vigorous exercise affects the bone metabolism response. Qualified participants will receive lab screenings, physical exams, and exercise testing. Financial compensation is provided. If you are between the ages of 60 and 80 years old and often walk for exercise, you may qualify for this study. If interested, email Toby Wellington at toby.wellington@ucdenver.edu or call 720-848-6376 (PI: Wherry, COMIRB# 15-0250).

The **Rest-HF** Study seeking women and men, age 65 or older, with heart failure for a research study on Increasing Physical Activity in Heart Failure patients. We want to know how two different physical activity programs can help patients with heart failure to be more active. You will be asked to wear an activity monitor and keep record of any physical activity. You will meet with an exercise behavioral specialist to discuss physical activity recommendations and set goals at four separate visits over 12 weeks. For more information call Blythe Dollar at 720-848-7561 or email her at blythe.dollar@ucdenver.edu.

To learn more about a study, offer comments, suggest an article, request this newsletter electronically or be removed from our mailing list contact:
Drew Hepler, 720-848-6480, Andrew.Hepler@ucdenver.edu.

«First Name»«Last Name»
«Address»
«City»«State»«Zip»

IMAGE Research Group
Mailstop B-179
12401 East 17th Avenue, RM 356
Aurora, CO 80045

